

CLAIMS: I claim:

1 1. A wheelchair suspension comprising:
2 a frame member;
3 a pivoting assembly having:
4 a pivot arm pivotally coupled to the frame and
5 having a first engagement surface;
6 a drive assembly pivotally coupled to the frame
7 and having a second engagement surface configured to engage
8 the first engagement surface; and
9 wherein the second engagement surface is
10 configured to disengage from the first engagement surface
11 upon pivotal movement of the drive assembly in a first
12 direction.

2 2. The suspension of claim 1 wherein the first engagement
surface comprises a shoulder.

1 3. The suspension of claim 1 wherein the second
2 engagement surface comprises a cylindrical shape.

1 4. The suspension of claim 1 wherein the first engagement
2 surface comprises an undulating surface.

1 5. The suspension of claim 3 wherein the cylindrical
2 shape is received by the undulating surface.

1 6. The suspension of claim 1 wherein the pivot arm and
2 the drive assembly are pivotally coupled to the frame at a
3 common location on the frame.

1 7. The suspension of claim 1 further comprising a
2 resilient member for regulating the second engagement
3 surface disengage from the first engagement.

1 8. The suspension of claim 1 wherein the pivot arm
2 further comprises a first and second ends and wherein the
3 first end has a castor assembly coupled thereto and wherein
4 the second end comprises the first engagement surface.

1 9. The suspension of claim 6 wherein the pivot arm
2 further comprises a first and second ends and wherein the
3 first end has a castor assembly coupled thereto and wherein
4 the second end comprises the first engagement surface, and
5 wherein the common pivot location is between the first and
6 second ends.

1 10. A wheelchair suspension comprising:
2 a frame;
3 at least one pivot arm pivotally coupled to the frame
4 and having a first engagement surface;
5 at least one drive assembly pivotally coupled to the
6 frame and having a second engagement surface;
7 wherein the pivot arm and drive assembly are pivotally
8 coupled to the frame at a common location on the frame; and
9 wherein the first and second engagement surfaces are
10 configured to engage each other upon pivotal motion of the
11 drive assembly in a first direction and to disengage from
12 each other upon pivotal motion of the drive assembly in a
13 second direction.

11. The suspension of claim 10 wherein the first
engagement surface comprises a shoulder.

12. The suspension of claim 10 wherein the second
engagement surface comprises a cylindrical shape.

13. The suspension of claim 10 wherein the first
engagement surface comprises an undulating surface.

14. The suspension of claim 10 further comprising a
resilient member disposed between the pivot arm and the
drive assembly to limit the relative pivotal movement
therebetween.

15. The suspension of claim 10 wherein the pivot arm
comprises a front portion having a at least one caster
coupled thereto and a rear portion having the first
engagement surface.

16. The suspension of claim 15 wherein the pivotal
coupling of the pivot arm is between the front and rear
portions of the pivot arm.

17. The suspension of claim 10 wherein pivotal motion of
the drive assembly in a first direction causes pivotal
motion of the pivot arm and pivotal motion of the drive
assembly in a second direction does not cause pivotal
motion of the pivot arm.

18. A wheelchair suspension comprising:
a frame having first and second sides;

3 first and second pivoting assemblies coupled to the
4 first and second sides of the frame, each pivoting assembly
5 comprising:

6 a pivot arm pivotally coupled to the frame and
7 having a first engagement surface;

8 a drive assembly pivotally coupled to the frame
9 and having a second engagement surface configured to engage
10 the first engagement surface; and

11 wherein the second engagement surface is
12 configured to disengage from the first engagement surface
13 upon pivotal movement of the drive assembly in a first
14 direction.

1 19. The suspension of claim 18 wherein the first
2 engagement surface comprises at least a partially
3 undulating surface.

1 20. The suspension of claim 19 wherein the second
2 engagement surface comprises a shape configured to be at
3 least partially seated within the at least partially
4 undulating surface.